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Determinants of Sexual and Reproductive Health among Brazilian youth (aged 18 to 29 years old)

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ABSTRACT. This study assessed the main determinants of sexual and reproductive health of Brazilian youth. It was approved by the Ethics Committee of the Medicine Faculty of the University of Brasília, and it received support from Paho and Brazilian Ministry of Health. 1.208 youngsters (18 to 29 years old) in 15 states and Federal District were interviewed at their residences, during the second semester of 2011. Margin of error, adjusted regional and nationally, was 2.8% (CI: 95%), regarding the assessed sample. A KAP scale (knowledge, attitudes, and practices) with 17 questions (-17 to +17 points) was generated. A questionnaire was pre-tested for consistency and validity analysis was performed. KAP scale was used as dependent variable in adjusted linear regression models. Mean KAP score was 5.65 points. Gaps in KAP were: 70% of the youth do not know when the fertility period of a woman is. 42% of youth do not recognize condoms as a method to prevent unwanted pregnancy and STDs. The main factors associated to explaining variances in KAP are gender, education, religion, access to health services, having had sexual intercourse in the last 12 months, and having friends as the main personal reference ($p < 0.05$). Youngsters with higher education, women, non-Protestant, who claim to know where to find health services have better KAP level of reproductive health. Studies are necessary to support public policies that increase the KAP levels in sexual and reproductive health of the most vulnerable groups, such as the segment comprising low education, men and Protestants.

Keywords: social determinants of health, youngsters, sexual and reproductive health, scale.

Fatores determinantes da saúde sexual e reprodutiva dos jovens brasileiros de 18 a 29 anos

RESUMO. Este estudo avaliou as determinantes de saúde sexual e reprodutiva da juventude brasileira. Aprovado pelo Comitê de Ética da UnB, apoiado pela Organização PanAmericana de Saúde e Ministério da Saúde. 1.208 jovens (18 a 29 anos) foram ouvidos em suas residências em 15 Estados e DF, no segundo semestre de 2011. Margem de erro, ponderada nacional e regionalmente, de 2,8% (IC: 95%). Escala CAP (conhecimentos, atitudes e práticas) com 17 questões (-17 a +17 pontos) foi gerada e questionário pré-testado para análise de consistência e validade. Escala foi usada como variável dependente em modelos de regressão linear ajustados. Média do nível de CAP de 5.65 pontos. 70% não sabem quando é o período fértil da mulher. 42% não reconhecem preservativos para prevenção de gravidez não desejada e DST. Fatores que explicam variações de CAP são: gênero, educação, religião, acesso aos serviços de saúde, ter tido relação sexual nos últimos 12 meses e ter amigos como referência pessoal ($p < 0.05$). Jovens de maior escolaridade, mulheres, não evangélicos, e que afirmam saber onde encontrar serviços de saúde têm CAP mais elevado. São necessários estudos que subsidiem políticas públicas para elevar níveis de CAP dos segmentos vulneráveis: indivíduos de baixa escolaridade, homens e evangélicos.

Palavras-chave: determinantes sociais da saúde, jovens, saúde sexual e reprodutiva, escala.

Introduction

According to the Programme of Action of the United Nations International Conference on Population and Development (Organização das Nações Unidas [ONU], 1994) that took place in the city of Cairo, Reproductive Health is defined as the state of physical, mental and social welfare in all aspects of the experience of sexuality and the rights related to the theme, besides its functions, and not only the absence of illnesses or diseases. The concept is also understood by the Ministry of Health as a right of youngsters, including: access to information, means and techniques related to conception or contraception; the right to decide, with freedom and responsibility, to have children or not; how many children, and when, they want to

have; and the right to exercise their sexuality and reproduction, free from prejudice, imposition and violence (Brasil, 2013). However, it is known that the lack of accurate information contributes, in Brazil, to the high number of abortions and maternal mortality. Estimates made in 2012 by the Ministry of Health point to 728,000 to 1 million abortions per year in Brazil. The current rate of 3.7 events per 100 women at fertile age is much higher than the values observed in countries of Western Europe, where abortion is legal, safe and accessible (Brasil, 2008). By Maternal Mortality is understood

> […] the death of a woman occurred during pregnancy, abortion, childbirth or up to 42 days after it, regardless of pregnancy length or location, due to causes related to or aggravated by pregnancy, or by measures taken in relation to it (Brasil, 2012, p. 14).

The problem is also reflected in the number of hospital admissions; there are about 240,000 annually in Brazil, only in the National Health System, for the treatment of complications of abortions, generating expenses of R$ 45 million per year (Brasil, 2008).

This reality is far from national regulatory benchmarks, which provide sexual and reproductive rights of adolescents, as expressed in the section below:

> (In Brazil) many of the legal guarantees directly affect the adolescent population (guarantee of education during pregnancy and puerperal period or maternity leave, condom distribution, non-discrimination by serology in the school environment). These are important tools for preservation of sexual and reproductive rights, of privacy in medical care, in the search for reliable information on health and access to inputs such as condoms and contraceptive methods (Fundo de População das Nações Unidas [UNFPA], 2007, p. 14).

Thus, the main goal of this study was to evaluate the key determinants of sexual and reproductive health of Brazilian youth through their level of knowledge, attitudes and practices (KAP)[1]. This is an issue that merits investigation, especially the need to strengthen the keys to formulate, perform and evaluate public policies that enable adolescents and youngsters to expand and qualify their ideas, attitudes and habits in sexual and reproductive health. Chronic ailments, such as high rates of abortion and maternal mortality due to abortion, justify the development of studies that may help to minimize this reality.

Furthermore,

> […] studying the factors related to this situation is essential for the formulation of management and planning strategies, since the maternal mortality rate in a country is an excellent indicator of its social reality (Ferraza & Bordignon, 2012, p. 529).

It is important to multiply the

> […] approaches to other dimensions that include sexual health in different moments of the life cycle, and also to promote the effective involvement and co-responsibility of men (Brasil, 2013, p. 32).

Broadening the discussion and debate channels about the issues involving sexual and reproductive health of youngsters appears to be a solid preventive way for a behavior change on a scale that allows the country to leverage increasingly significant changes regarding the issues reported in this article.

Material and methods

This study was performed after Approval (CEP-FM n° 026/2011) by the Ethics Committee of the Medical Faculty of the University of Brasília (UnB). The nature of the study is quantitative exploratory and explanatory, and a more detailed explanation is given later on. The selected sample comprised 1.208 youngsters with ages between 18 and 29 years old, in 15 States and the Federal District, with a sampling error defined as 2.7% based on a level of significance of 95%. The sampling procedure used a stratification by size of municipalities in three categories: up to 50 thousand, between 50 thousand and 500 thousand and over 500 thousand inhabitants.

The inclusion criteria for subjects of the research were: young men and women, ages between 18 and 29 years old, Brazilians, resident in Brazil, in the cities and regions included in the sampling design approved in the research protocol, literate, sexually inexperienced and active, without restrictions on skin color, economic status, gender or sexual orientation, who have given their express informed consent to participate in the study or in accordance with the applicable laws.

The exclusion criteria were: people under 18 and over 29 years old, illiterate or functional illiterate (with difficulties in reading the Informed Consent Form- ICF), individuals with mobility difficulties at completing the questionnaire, young Brazilians living in other countries and young foreigners residing in Brazil.

The allowed score for each variable was measured, according to the references included in this study, especially the references of the Ministry of Health, validated by the Department of STD/Aids and Viral Hepatitis of the Ministry of Health and by

[1]The Scales of Knowledge, Attitudes and Practices (KAP) refer to instruments to assess Knowledge, Attitudes and Practices in the social, environmental or cultural spheres (Kaliyaperumal, 2004).

he team of the Pan American Health Organization (Paho) that participated in the study. All 17 questions of the scale ranged from -1 to 1, considering the correct answers according to the literature used. The team consensually assumed equal weight to all the variables inserted in the study. Authors of design guides for KAP scales usually suggest the use of similar weights to the variables applied (Kaliyaperumal, 2004), from its Validity plan. Establishing the Validity of a Scale is to establish what to be measured, is to know what is being considered. "Only when we conclude that a study used valid measures of its key concepts can we have some hope that its conclusions are valid" (Schutt, 2004, p. 87).

Thus, in relation to the main dependent variables of the study, the score was virtually entirely based on the Likert scale, and generated from positive and negative responses expected on reproductive health. The score for each variable ranged from positive 1 to negative -1, depending on the response for each variable.

The 17 variables that make up the Sexual Health and Reproductive scale used in the study were as follows, with their scores for the answer choices (Table 1):

Table 1. Score table for the 17 variables of the Scale.

1) In what time of the month is a woman more likely to get pregnant? (knowledge)	
During her period	1
Right after her period	0.5
One week after her period	1
Anytime	-1
I do not know	0
2) Schools must provide information on sexual and reproductive health to both male and female students (knowledge)	
Completely agree	1
Partially agree	0.5
Neither agree nor disagree	0
Partially disagree	-0.5
Completely disagree	-1
3) A woman who has many children should be force to undergo tubal ligation (attitude)	
Completely agree	-1
Partially agree	-0.5
Neither agree nor disagree	0
Partially disagree	0.5
Completely disagree	1
4) A woman is completely fulfilled only if she is a mother (attitude)	
Completely agree	-1
Partially agree	-0.5
Neither agree nor disagree	0
Partially disagree	0.5
Completely disagree	1
5) If a woman becomes pregnant, both parents are responsible for caring for the child (attitude)	
Completely agree	1
Partially agree	0.5
Neither agree nor disagree	0
Partially disagree	-0.5
Completely disagree	-1
6) The option of aborting should be the responsibility of the woman (attitude)	
continuation…	
…continuation	
Completely agree	1
Partially agree	0.5
Neither agree nor disagree	0
Partially disagree	-0.5
Completely disagree	-1
7) Adolescents and youngsters have the right to choose their preferred contraceptive method (attitude)	
Completely agree	1
Partially agree	0.5
Neither agree nor disagree	0
Partially disagree	-0.5
Completely disagree	-1
8) Adolescents and youngsters have the right to decide when to have children (attitude)	
Completely agree	1
Partially agree	0.5
Neither agree nor disagree	0
Partially disagree	-0.5
Completely disagree	-1
9) I feel confident I that know all possible ways to avoid undesired pregnancy (attitude)	Positive answer scores 1; negative scores -1.
10) Have you ever used condoms? (practice)	
I use/used condoms	1
I never used condoms	-1
11) Have you ever used condoms to prevent pregnancy? (practice)	
Yes	1
No	-1
I do not know	0
12) Did you use any kind of contraceptive last time you had sexual intercourse? (practice)	
Yes	1
No	-1
I do not remember	0
I never had sexual intercourse	0
13) In the last 12 months, did you visit a health center to obtain: (practice)	
Contraceptives Information on or treatments for STDs Information on sexual education	Multiple answers. At least one positive answer scores 1
14) Can a woman become pregnant in her first sexual intercourse? (knowledge)	
True	1
False	-1
I do not know	0
15) Condom is the only method to prevent pregnancy and Sexually Transmitted Diseases (STDs) (knowledge)	
True	1
False	-1
I do not know	0
16) Pulling out the penis before coming is a good method to prevent pregnancy (knowledge)	
True	-1
False	1
I do not know	0
17) Condom to prevent sexually transmitted diseases and pregnancy: effectiveness of the method, if used correctly (knowledge)	
Highly effective	1
Effective	0.5
Little effective	0
Ineffective	-0.5
Highly ineffective	-1

It is also worth noting that the study presented here is one of the three main topics of the research protocol submitted to the Ethics Committee. In addition to the variables related to sexual and reproductive health, HIV-Aids and Viral Hepatitis contours were also analyzed, besides Sexual Education. The latter, however, are not part of the submitted article. The full questionnaire, including the bibliographic references for the questions used in the Scale, is too large, which prevents its

presentation in the text or as Annex. The questionnaire will be immediately made available upon request to the main or secondary authors via email, since the property of the information in this study is public, according to the research protocol approved, being accessible to any researcher and/or individual interested in its results, methods or any other information inherent to the research, after its publication.

The pre-testing process of the questionnaire was conducted among 30 youngsters from the Federal District for prior examination, and factor analyses were used to verify the validity and consistency of the questions. From the level of loading of variables and their correlations, the three areas were established for variables of knowledge, attitude and practice in reproductive health.

In the process of pre-testing, the loading level of the variables in the Scale were assessed based on a factor analysis. After varimax rotation, were considered the variables with ratio above 0.10 in five factors. Only one variable presented lower level and was discarded (visiting a health center in the last 12 months). With this adjust, the level of consistency of the scale was increased from 0.76 to 0.78 (Cronbach Alfa).

After data collection, a database was generated in Microsoft Excel and after entering the data, three members of the research team were responsible for checking possible inconsistencies and entry errors. With the confirmation of database consistency, the spreadsheet was exported to the system STATA 9.0 to perform the statistical analyses of data.

Two approaches of statistical analysis were used: exploratory and explanatory. For exploratory analyzes, means, intervals of confidence and normality tests were performed for the variables composing the study range (dependent variable). In addition, the socio-demographic profile of the sample and other independent variables were analyzed, as the main source of sexual education, level of access to health services, personal references, history of alcohol and drugs and frequency of sexual intercourse.

For the explanatory analyses, the first step was the evaluation of normality of the distribution of the main dependent variable (KAP Scale), and after confirmation of non-normality, the model of 'Generalizing Estimation Equation' (GEE) was applied. For the GEE regressions, non-adjusted models (variable to variable) and one adjusted model were generated, only including the variables for socio-demographic profile of the respondents. After the definition of the adjusted model, the independent variables of the research (source of sexual education, level of access to health services, personal references, history of alcohol and drugs and frequency of sexual intercourse) were tested one by one to verify the statistical significance.

During the questionnaire, all forms that received effective signatures in the Informed Consent Form were considered. Since the research dealt only with legally adult youngsters, permission from parents or guardians was not necessary.

Results and discussion

Based on the results of the initial exploratory analysis, it was found that only 30% of the individuals still study, only 17% reached high school and 56% have failed in school; 73.5% lost their virginity between the ages of 14 and 18 and 90% have had sexual intercourse. Furthermore, 95% considered themselves heterosexual; 55% of the respondents were female; 56% consider themselves black or brown; 52.3% are Catholic, 29% are Protestants and 12% believe in God, but have no specific religion. 90% have had sexual intercourse and, of these, 93% had intercourse in the last 12 months.

By the sum of all the scores for the 17 variables included in the KAP scale, it was found that the average level of knowledge, attitudes and practices in reproductive health achieved by youngsters was 5.65 points (Table 2). The 'Shapiro-Wilk' normality test was also applied (Vasicek, 1976) confirming the non-normality of the distribution of KAP scale scores among youngsters. As mentioned before, based on this finding, models of 'Generalizing Estimation Equation' linear regression were also applied.

The following is the initial result for the linear regression using the adjusted socio-demographic variables.

Table 2. Descriptive results of the variables of the Scale.

1) In what time of the month is a woman more likely to get pregnant?	
During her period	8.8%
Right after her period	25.7%
One week after her period	31.4%
Anytime	11.5%
I do not know	22.7%
2) Schools must provide information on sexual and reproductive health to both male and female students	
Completely agree	78.4%
Partially agree	12.4%
Neither agree nor disagree	5.0%
Partially disagree	2.0%
Completely disagree	2.2%
3) A woman who has many children should be force to undergo tubal ligation	
Completely agree	39.2%
Partially agree	14.2%
Neither agree nor disagree	19.4%
Partially disagree	7.5%
Completely disagree	19.7%

continuation…

…continuation	
4) A woman is completely fulfilled only if she is a mother	
Completely agree	18.6%
Partially agree	14.4%
Neither agree nor disagree	15.0%
Partially disagree	18.9%
Completely disagree	33.1%
5) If a woman becomes pregnant, both parents are responsible for caring for the child	
Completely agree	90.1%
Partially agree	2.6%
Neither agree nor disagree	1.6%
Partially disagree	1.6%
Completely disagree	4.0%
6) The option of aborting should be the responsibility of the woman	
Completely agree	12.7%
Partially agree	7.0%
Neither agree nor disagree	18.7%
Partially disagree	10.5%
Completely disagree	51.2%
7) Adolescents and youngsters have the right to choose their preferred contraceptive method	
Completely agree	62.2%
Partially agree	18.8%
Neither agree nor disagree	7.2%
Partially disagree	5.0%
Completely disagree	6.8%
8) Adolescents and youngsters have the right to decide when to have children	
Completely agree	52.3%
Partially agree	16.9%
Neither agree nor disagree	8.3%
Partially disagree	7.2%
Completely disagree	15.4%
9) I feel confident that I know all possible ways to avoid undesired pregnancy	Men: 10% yes and 46% no. Women: 67% yes and 50% no.
10) Have you ever used condoms?	
I use/used condoms	90.5%
I never used condoms	9.5%
11) Have you ever used condoms to prevent pregnancy?	
Yes	89.8%
No	8.1%
I do not know	2.1%
12) Did you use any kind of contraceptive last time you had sexual intercourse?	
Yes	45.4%
No	39.9%
I do not remember	7.1%
I never had sexual intercourse	7.6%
13) In the last 12 months, did you visit a health center to obtain: (Multiple answers)	
Contraceptives	54.9%
Information on or treatments for STDs	13.9%
Information on sexual education	31.2%
14) Can a woman become pregnant in her first sexual intercourse?	
True	82.1%
False	9.3%
I do not know	8.6%
15) Condom is the only method to prevent pregnancy and Sexually Transmitted Diseases (STDs)	
True	58.1%
False	34.8%
I do not know	7.1%
16) Pulling out the penis before coming is a good method to prevent pregnancy	
True	28.4%
False	55.8%
I do not know	15.8%
17) Condom to prevent sexually transmitted diseases and pregnancy: effectiveness of the method, if used correctly	
Highly effective	56.7%
Effective	33.5%
Little effective	5.5%
Ineffective	1.7%
Highly ineffective	2.6%

Considering the Reference Group, the following results were observed (Table 3):

Table 3. Results of the variables from the socio-demographic profile associated to the variations in the Scale.

Multivariate Regression KAP Scale	Coefficient	Confidence Interval 95%		p > t
Male	-1.13	- 1.60	- 0.65	-
Protestant	- 0.86	- 1.40	- 0.33	0.001
Higher Education	1.46	0.79	2.13	-
Failed in School	- 0.59	- 1.08	- 0.10	0.017

*Reference: 5.63 (woman, white, single, non-protestant, complete high school, studies, has never failed school and heterosexual).

Profile variables directly associated to an explanation on the variation in KAP scale in reproductive health are related to gender, education and religion. Concerning gender, it was observed that, in general, young women presented higher knowledge, attitudes and practices when compared to young men. They obtained average score of 5.63 in the scale, while men obtained an average of 4.50 points.

Regarding education, the longer a young man studied, the more significant the level of Knowledge, Attitudes and Practices (KAP) in reproductive health. Those who have completed higher education reached 7.09 points. Another aspect that influences the KAP level is if the youngster have ever failed a school year, resulting in a decrease of 0.59 points.

Individuals who declared themselves as Protestants also presented, in average, a lower KAP level in reproductive health, with decrease of 0.86 points in the reproductive health scale compared to non-Protestants.

GEE linear regression models adjusted for each of the five specific independent variables used in the study were tested using the main variables of the socio-demographic profile (source of sexual education, level of access to health services, personal references, history of alcohol and drugs and frequency of sexual intercourse).

Regarding education sources, no specific source has reached the level of statistical significance in the model adjusted for the socio-demographic profiles analyzed. This was also the case of history alcohol and drugs. However, for the variables level of access to health services, personal reference and frequency of sexual intercourse, statistically significant variations were found.

In the case of access to health services, youngsters who claimed to know where to find/seek medical treatment and information about sexual health were at a KAP level in reproductive health significantly higher than those who claim not to know (Table 4).

As shown above, the average of youngsters, regardless of race, income, education, religion and age, who do not know where to find/seek medical treatment and sexual health information reaches

4.33 in the KAP scale of reproductive health. As for those who know, this average rises 1.68 points (Figure 1).

Table 4. Results of the independent variables adjusted to the socio-demographic profile associated to the variations in the Scale.

Multivariate Regression KAP Scale	Coefficient	Confidence Interval 95%		p > t
Access to health services	1.68	1.08	2.29	0.000
Had sexual intercourse in the last 12 months	1.99	1.34	2.65	0.000
Virgins x Non-virgins	2.66	1.85	3.47	0.000
Personal reference	1.30	0.16	2.45	0.026

*Controlled by gender, race, marital status, education, school approval and sexual orientation.

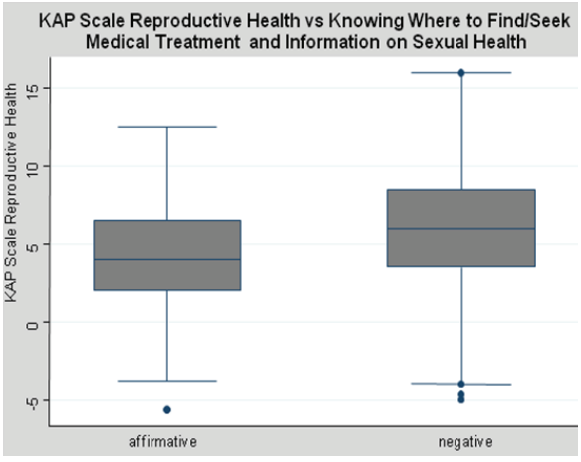

Figure 1. Results of association of the variable 'knowing where to find/seek information and treatments concerning sexual health' with the variation in the Scale.

This result is similar to that for youngsters who claim to have had sex in the last 12 months compared to those who remained inactive in the same period. The figure below presents the adjusted regression (Figure 2).

The average of youngsters, regardless of race, income, education, religion and age, who did not have sex in the last 12 months, reached 5.13 in KAP scale in reproductive health. As for those who claim to have had sex in the last 12 months, this average rises 1.99 points.

This was also the case of the comparison between virgins and non-virgins. In this case, the young virgins, regardless of race, income, education, religion and age, reached an average of 4.3 points in the KAP scale of reproductive health. Considering non-virgins, this level is increased in an average of 2.66 points.

Finally, having a friend as a personal reference contributes to an increase in the average level of KAP scale. Youngsters who declared having no friends as a personal reference reached 5.63 points in KAP scale of reproductive health. On the other hand, for individuals who reported having a friend as the primary personal reference, regardless of race, income, education, religion and age, the average level in the KAP scale increased 1.3 points.

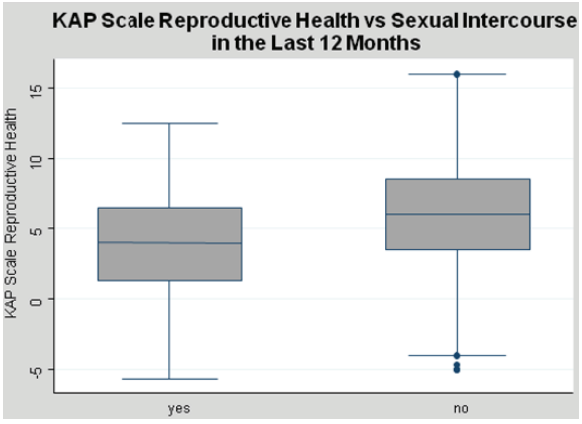

Figure 2. Results of association of the variable 'had sexual intercourse in the last 12 months' with the variation in the Scale.

In according to the United Nations Population Fund (UNFPA):

> […] the way men behave has a direct relation with their education and this is part of a social construction. It is important to know that men are not naturally 'incompetent to care'. To change that, we must recognize that we can build other stories, exposing the boys from very early in childhood to other values and models of masculinity (UNFPA, 2007, p. 9, grifo no original).

Education is another socio-demographic factor associated with variation in KAP levels in sexual and reproductive health. In the case of education, this result is consistent with several other studies in the national and international literature, such as those by Hidin and Fatusi (2009) and Leite, Rodrigues, and Fonseca (2004). A person's level of education is a significant factor in explaining the variation of KAP levels in sexual and reproductive health. Certainly, this also happens to many other social behaviors such as use of condoms, of seat belts, etc. However, it is important to emphasize this factor for public policies to guarantee that strengthening regular education is always considered as a priority.

Regarding religion, although the study showed an association between declaring oneself as Protestant with lower levels of KAP in sexual and reproductive health, studies indicate the need for caution in the definitions of religion and religiosity. According to Coutinho and Ribeiro (2014) it is necessary to be careful with the classification of 'being religious' and the various forms of interpretation of religious denomination. However, other studies indicate that religion can be a socio-demographic variable directly related to knowledge,

attitudes and practices in sexual and reproductive health. For example, Silva, Santos, Licciardi, and Paiva (2008, p. 688) affirm that youngsters declared as

> Protestants and Pentecostals were less agreed with the claim that sex is a source of pleasure and satisfaction, and a physical need like hunger and thirst.

Thus, religious influence cannot be disregarded.

Based on adjustments made in the socio-demographic profile of respondents, other independent variables showed significance in explaining the variation of KAP levels in reproductive health. The main one is related to access to sexual health services (treatment and information). This key factor should be, first, a guaranteed right of young Brazilians. However, the study found that a significant proportion of youngsters indicate not to have access to these services. As shown, this determinant is actually associated with an increased KAP level in sexual and reproductive health, even after adjustments for socio-demographic factors.

Another important result of the study was demonstrating that no source of sexual education cited in the study (parents, teachers, health professionals) is associated with positive change in KAP scale in reproductive health. This exposes the ineffectiveness of reproductive health education directed toward youngsters in Brazil. This finding suggests that programs in reproductive health need to be reviewed, in terms of content, timing, location and exposure. In practical terms, it can be said that youngsters are orphans of meaningful guidance related to reproductive health. Indubitably, this does not mean that there are not Brazilian programs in specific locations that may be contributing to improve the KAP level in reproductive health of youngsters. These programs should be urgently identified, systematized and implemented on a wide scale.

However, although they are not a significant source of sexual education, it is important to emphasize the importance of the relationship with friends to explain positive changes of KAP level in sexual and reproductive health. More important than being a source of sexual education, friends represent the possibility of support and extensive discussions on sexual and reproductive health, contributing to the reflection of youngsters. -A study performed in South Africa (Mason-Jones, Mathews, & Flisher, 2011) demonstrated that programs that make use of their own friends and youngsters as multipliers to promote sexual and reproductive health are not very effective to increase the use of condoms. The study also suggests that governments should recognize the barriers that these programs have for effective change in behavior among youngsters.

Finally, the frequency of sexual practices contributes to increase the KAP level in reproductive health. Although many studies use sexual practice as a dependent variable, it was interesting to note significant levels of association between sexual practice and KAP levels. As demonstrated above, youngsters who had sex in the last year have higher KAP levels in sexual and reproductive health. One explanation for this association may be the mistaken idea that sexual and reproductive health is restricted to the individual.

Studies performed by Price and Hawkins (2002) show that sexual and reproductive health is not individual, but shaped by social interactions and institutions. Thus, sexual abstinence is not associated with an increased understanding of socio-cultural dynamics that influence a full experience in sexual and reproductive health. The practice of sexuality offers the possibility of social interaction, increasing the opportunities for dialogue and choices regarding sexual and reproductive health, as the search for more information and services, and the decision on when and with whom to have children.

Even taking into account the robustness of the results found in this study, it points out some limitations that may contribute to compromise its validity and consistency. Regarding the validity, even with the use of pre-testing, some questions may not have been properly understood by some youngsters from specific regions of the country. This may be because the meaning of some expressions can be different in each of the studied Brazilian regions.

In addition, the KAP scale in reproductive health, although it can be used as an appropriate scientific parameter, does not address all issues related to reproductive health. That is, the scale does not comprise all the elements that define reproductive health. Specific questions, directed to procedures for prevention, treatments and education in reproductive health could increase the consistency of the scale. However, it is worth noting that even with this limitation, the parameters used were applied evenly to all respondents. Finally, studies mentioning abstinence as a means of reproductive health have not been used for the purposes of this study.

Conclusion

Considering the parameter of maximum score of 17 points in the Sexual and Reproductive Health

scale used in this study, it may be suggested that the level of education in reproductive health of young Brazilians is low.

Reproductive health is essentially a human right. Everyone, regardless of skin color, education, religion, gender or age, should receive clarification on his or her sexual and reproductive rights. This study shows that, among young Brazilians, this is not yet the case. Some groups are more vulnerable, which makes public and private interventions paramount to a significant expansion of understanding and appropriation of those rights by youngsters in Brazil.

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